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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,905	01/20/2005	Klaus Kock	2002P09019WOUS	7120

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

MIAH, LITON

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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03/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,905	Applicant(s) KOCK, KLAUS	
	Examiner LITON MIAH	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Action is in response to Applicant's amendment filed on January 3, 2008. Claims 13-32 are still pending in the present application. **This Action is made FINAL.**

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13, 14, 20, 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Karna (5,291,299).

For claim 13, Karna discloses a communications system for signaling apparatuses at an airport, comprising:
at least one central communications apparatus (**read as the control unit (which includes block 2-4 of figure 1, see column 2 line 37-39)**); and a plurality of signaling apparatuses 1 (figure 1), wherein a communication (read as a control signal) between the central communications apparatus and the signaling apparatuses 1 (**see figure 1 and column 2 line 38-39**) is performed via one or more circuits supplying the signal apparatuses with power (**see column 2 lines 1-13**), and wherein the communication between the central communications apparatus and the signaling apparatuses is performed in a frequency range using a number of frequency bands within the frequency range (**see column 2 lines 35-50**).

For claim 14, Karna discloses the communication is controlled by a number of time slices **(see column 2 lines 57-65)**.

For claim 20, Karna discloses up to five time slices are used **(see column 1 lines 37-43)**.

For claim 29, Karna discloses at least one decentralized communications apparatus is allocated to at least one signaling apparatus, and wherein the decentralized communications apparatus is configured to measure the reception quality of communications signals **(see column 4 lines 27-38)**.

For claim 30, Karna discloses at least one decentralized communications apparatus is allocated to at least one signaling apparatus, and wherein the decentralized communications apparatus is preprocesses communication signals **(see column 4 lines 2-12)**.

For claim 31, Karna discloses decentralized communication apparatuses forming an adaptive system **(see column 4 lines 43-50)**.

For claim 32, Karna discloses a communication path between at least two of the system components is determined using the measured reception quality **(see column 4 lines 21-27)**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15, 16, 21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karna.

Consider **claims 15 and 16**, and as applied to claims 13 and 14 above, Karna do not specifically disclose that the frequency range is chosen from the range between 10 kHz and 150 kHz.

Nonetheless, the Examiner takes Official Notice that using the claimed frequency range for communication between system components is well known in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the system of Karna in order to specifically used the frequency range between 10 kHz and 150 kHz for optimal communication.

For claim 21, Karna discloses up to five time slices are used (**see column 1 lines 37-43**).

Consider claims 23-25, and as applied to claims 13, 14 and 15, Karna do not specifically disclose that an OFDM method is used for performing the communication.

Nonetheless, the Examiner takes Official Notice that using an OFDM method for communication is well known in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the system of Karna in order to specifically used the OFDM method for optimal communication.

6. Claims 17-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karna in view of Ward (6,282,417).

For claims 17-19 and 22, Karna discloses all the subject matter of the claimed invention with the exception of using up to ten frequency bands. Ward from the same or similar fields of endeavor teaches up to ten frequency bands are used (**see column 8 lines 57-67**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have up to ten frequency bands as taught by Ward in the communication network of Karna. Using up to ten frequency bands as taught by Ward can be modified/implemented into the communication network of Karna. The motivation for using up to ten frequency bands as taught by Ward in the communication network of Karna being that it's a radio communication with air controller.

7. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karna in view of Norman et al (2003/0160707).

For claim 26-28, Karna discloses all the subject matter of the claimed invention with the exception of using a series circuit and a parallel circuit. Norman et al from the same or similar fields of endeavor teaches the central communications apparatus and the signaling apparatuses are connected via a series circuit (**see paragraph 0023**); the central communications apparatus and the signaling apparatuses are connected via a parallel circuit (**see paragraph 0024**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have a series circuit and a parallel circuit to connect the central communications apparatus and the signaling apparatus as taught by Norman et al in the communication network of Karna. Using a series circuit and a parallel circuit as taught by Norman et al can be

modified/implemented into the communication network of Karna. The motivation for using a series circuit and a parallel circuit as taught by Norman et al in the communication network of Karna being that it controls the field lighting at an airport.

Response to Arguments

8. Applicant's arguments filed January 3, 2008 have been fully considered but they are not persuasive.

Applicant argues that Karna does not disclose “**(a) communication between a communications apparatus and a signaling apparatus (see Remarks page 6 second paragraph), and (b) a number of frequency bands for the communication between the central communications apparatus and the signaling apparatuses (see Remarks page 6 second paragraph).**”

In response to the preceding arguments examiner respectfully submits that Karna teaches “**communication between a communications apparatus and a signaling apparatus**” as the control unit which includes blocks 2-4 of figure 1 (see column 2 lines 37-39) and which is being interpreted as the claimed central communication apparatus generates a control signal to control the signaling apparatuses (lightning units 1) (see column 1 lines 31-48 and column 2 lines 37-46). This control signal reads on the claimed communication between a communications apparatus and a signaling apparatus.

In response to the preceding arguments examiner respectfully submits that Karna teaches “a number of frequency bands for the communication between the

central communications apparatus and the signaling apparatuses” as the pulse generation uses different frequencies (column 2 lines 35-50).

Additionally, Applicant’s failure to adequately traverse the Examiner’s taking of Official Notice in the last Office Action is taken as an admission of the fact noticed (i.e., that is notoriously well known in the art to choose a frequency range from the range between 10 kHz and 150 kHz and to use an OFDM method is for performing the communication).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liton Miah whose telephone number is (571)270-3124. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571)272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Liton Miah

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617